

Figure 1

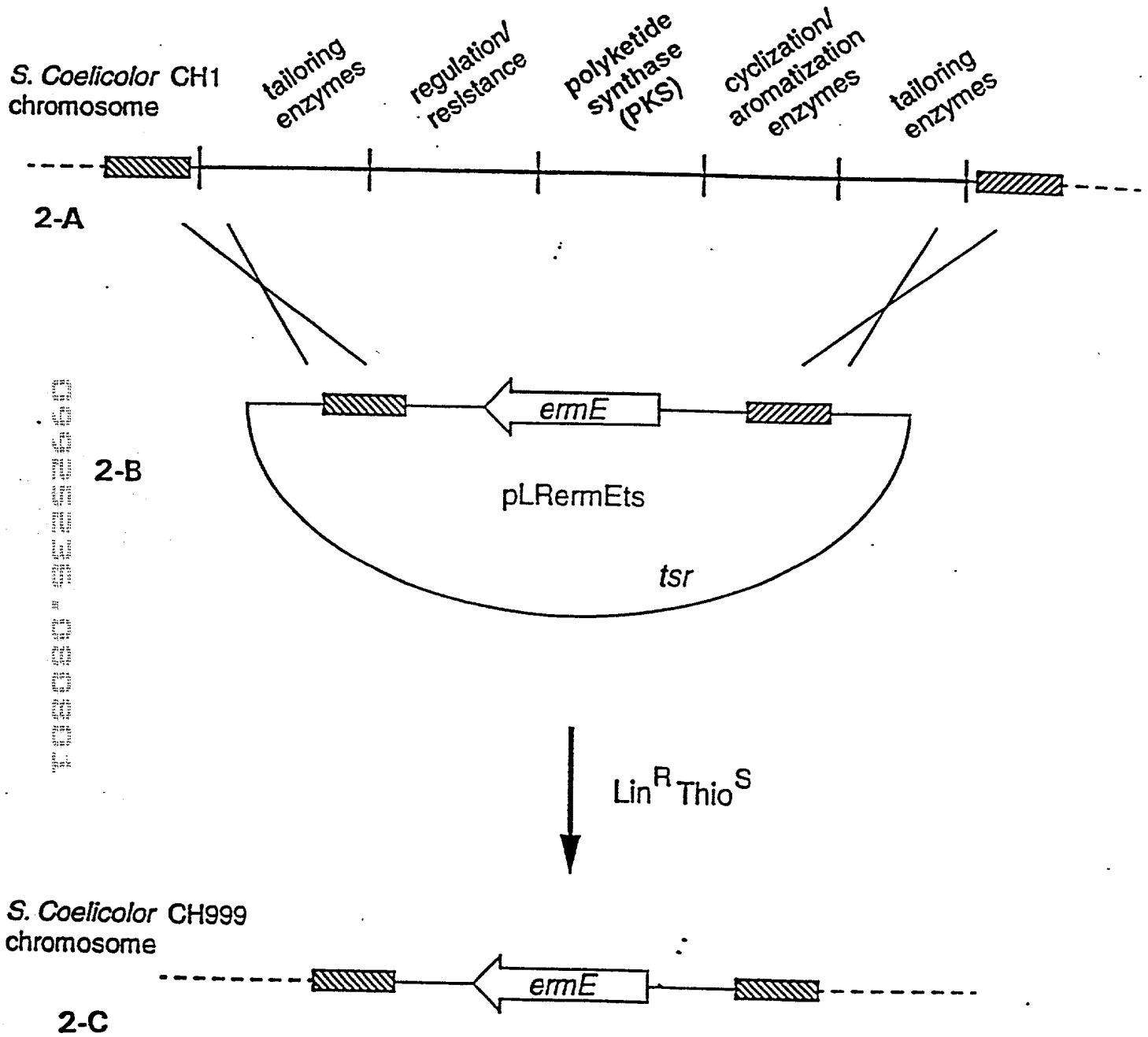


Figure 2

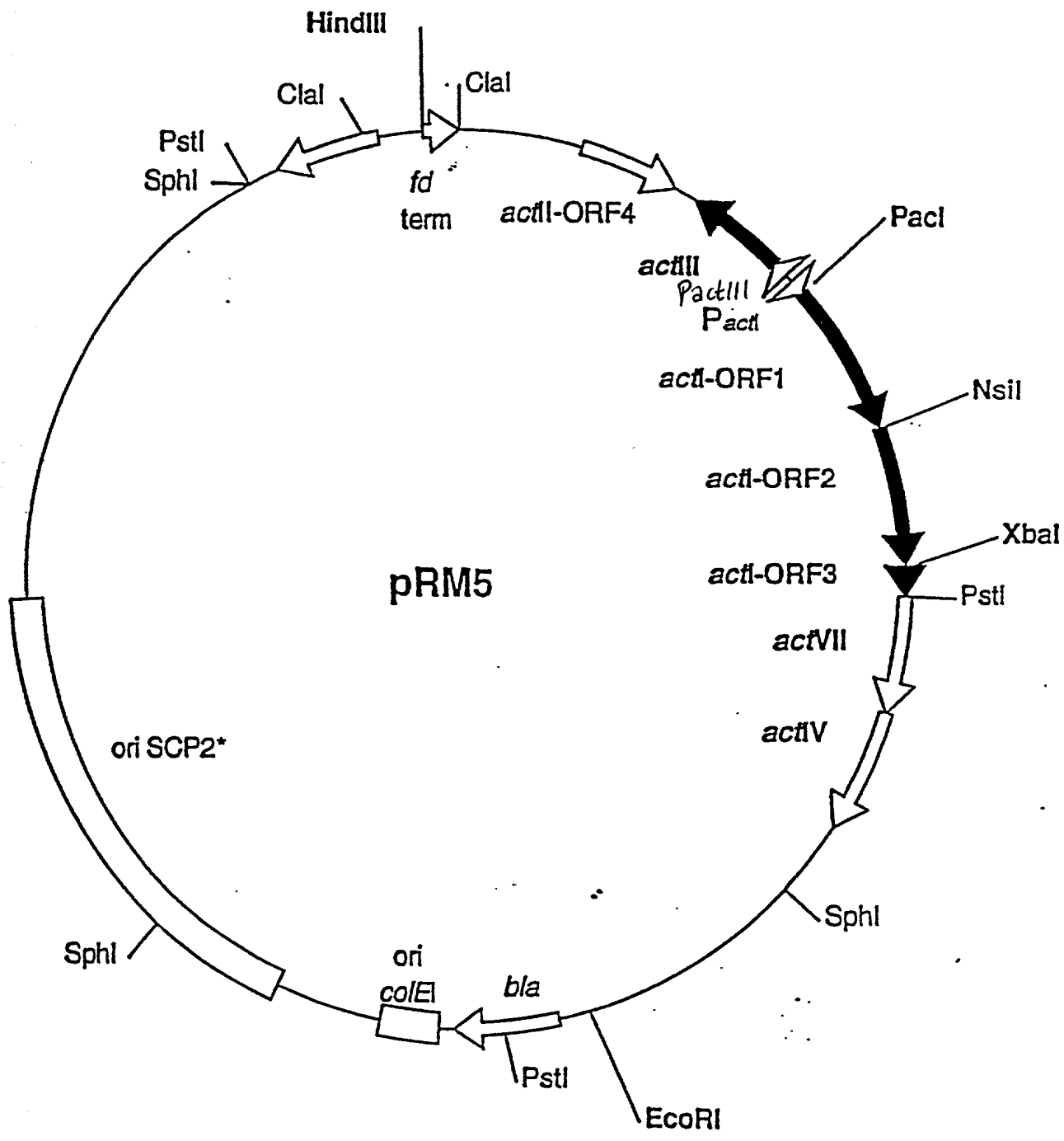
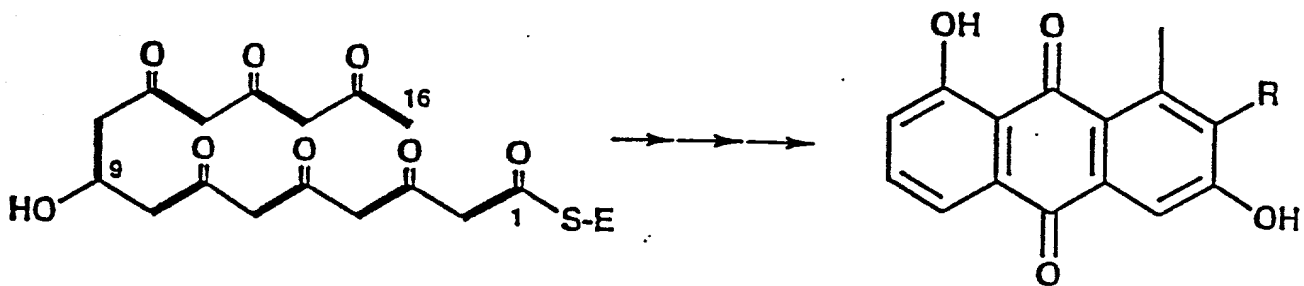


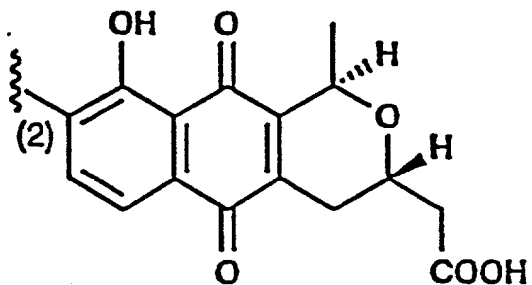
Figure 3



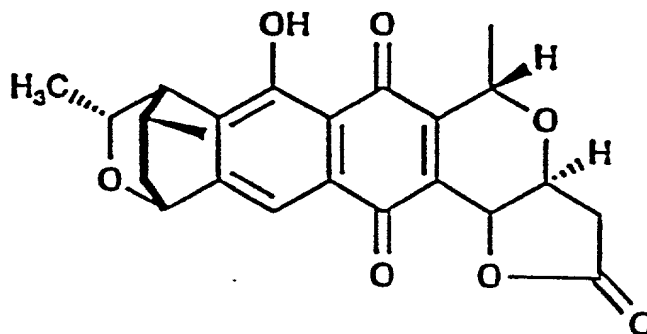
R
COOH 3,8-dihydroxy-1-
methylantraquinone-2-
carboxylic acid (1)

H Aloesaponarin II (2)

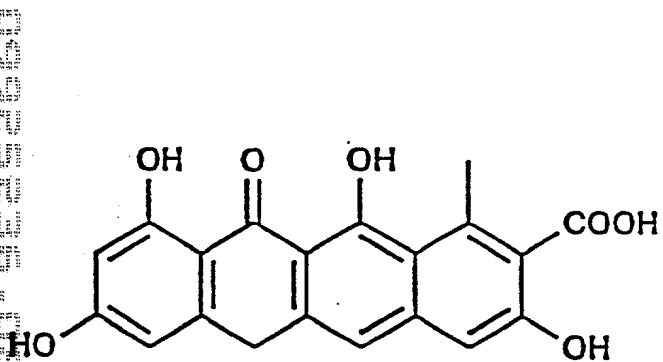
Figure 4



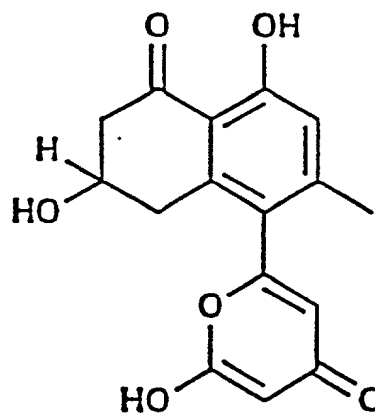
Actinorhodin (3)



Granaticin (4)



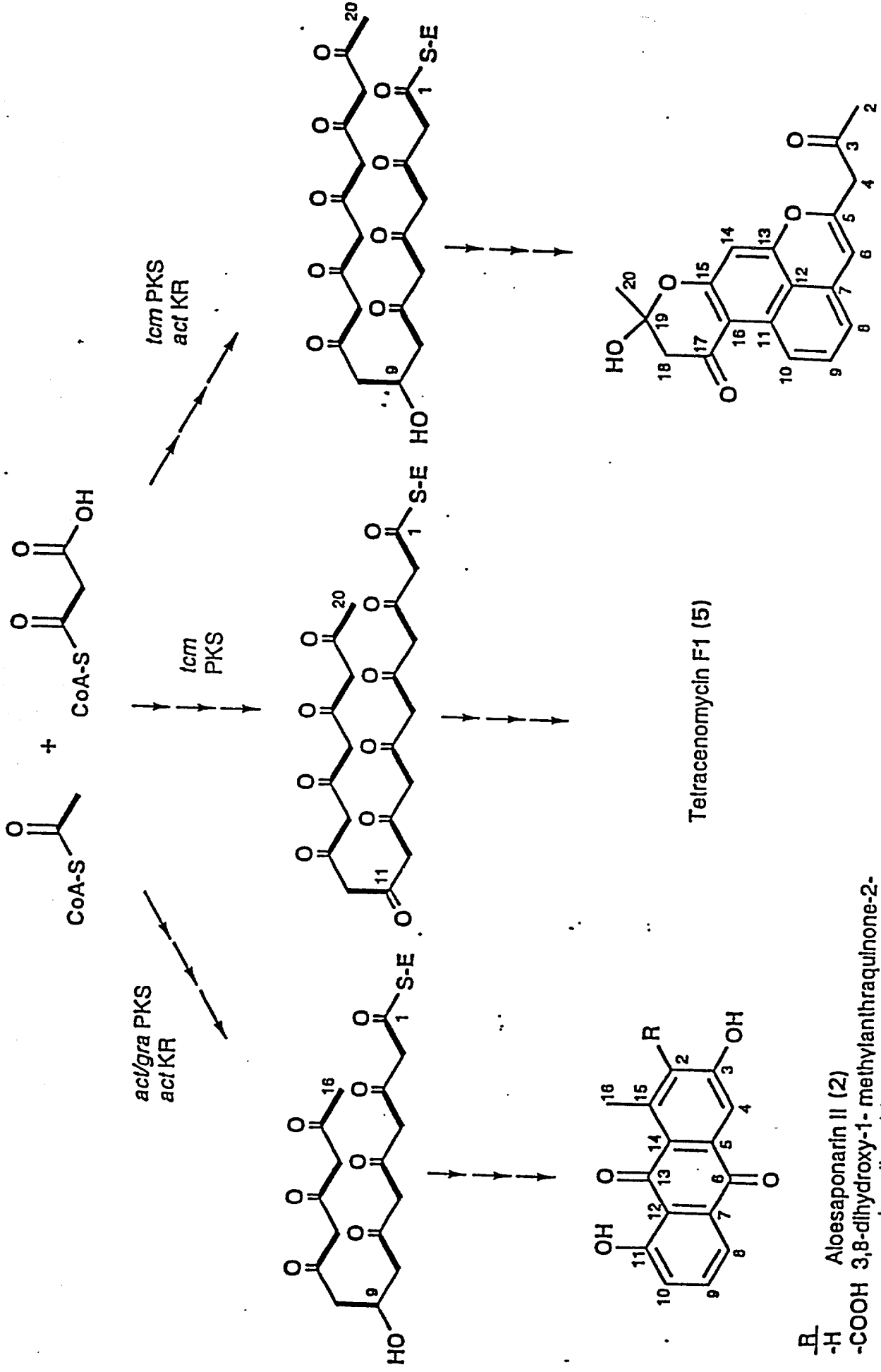
Tetracenomycin F1 (5)



Mutactin (6)

Figure 5

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20.



R
 -H Aloesaponarin II (2)
 -COOH 3,8-dihydroxy-1-methylanthraquinone-2-carboxylic acid (1)

Tetraacenomycin F1 (5)

RM20 (9)

Figure 6

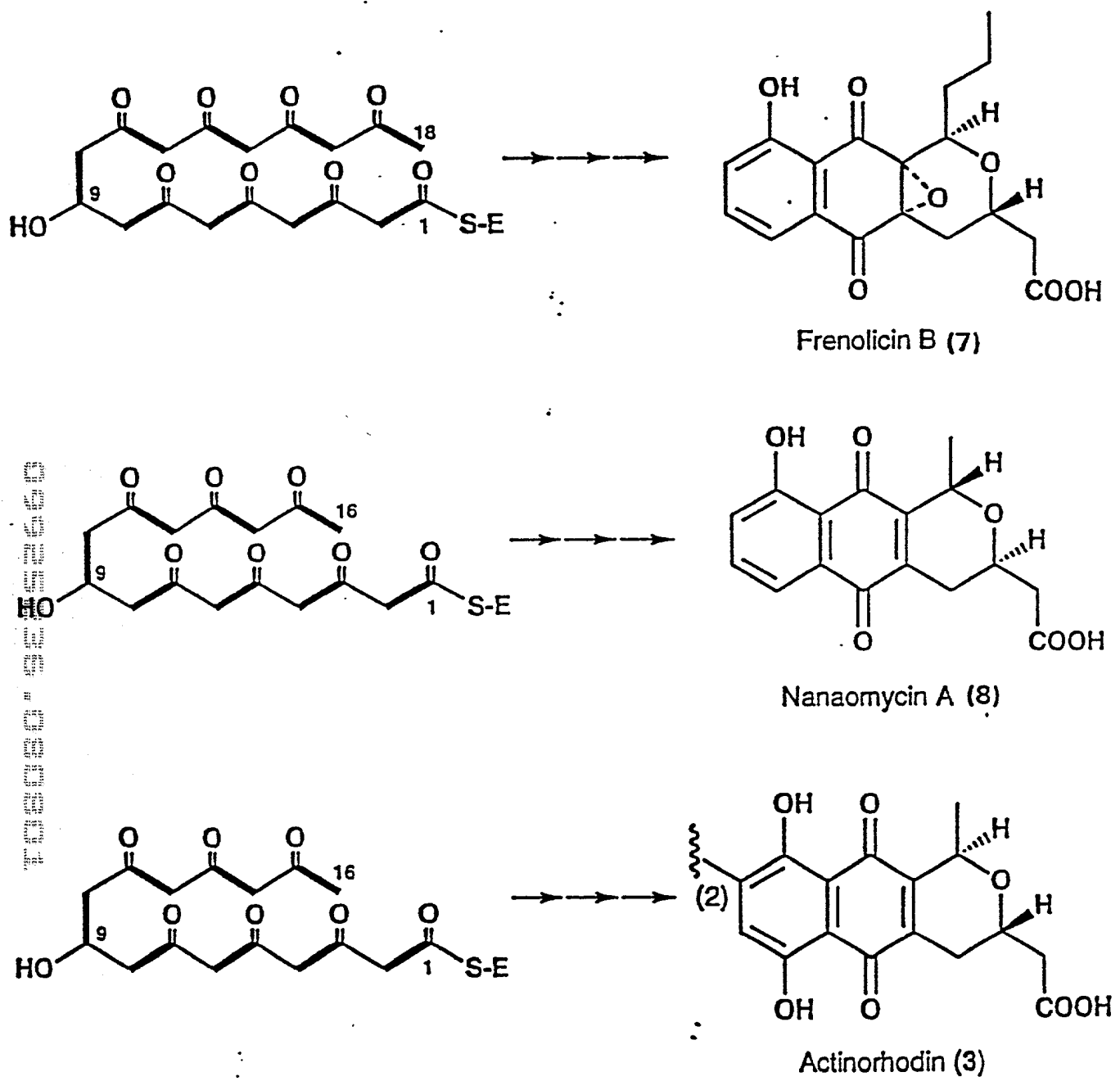


Figure 7

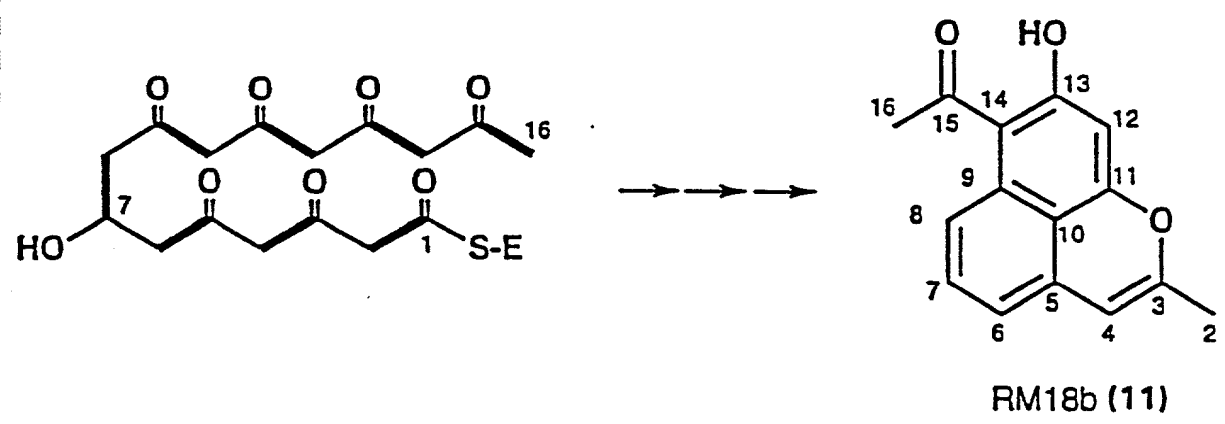
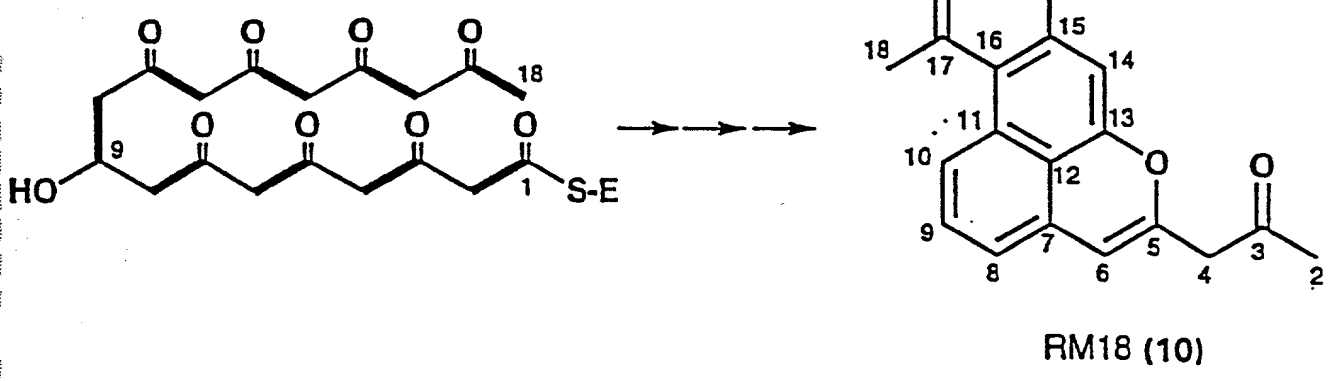
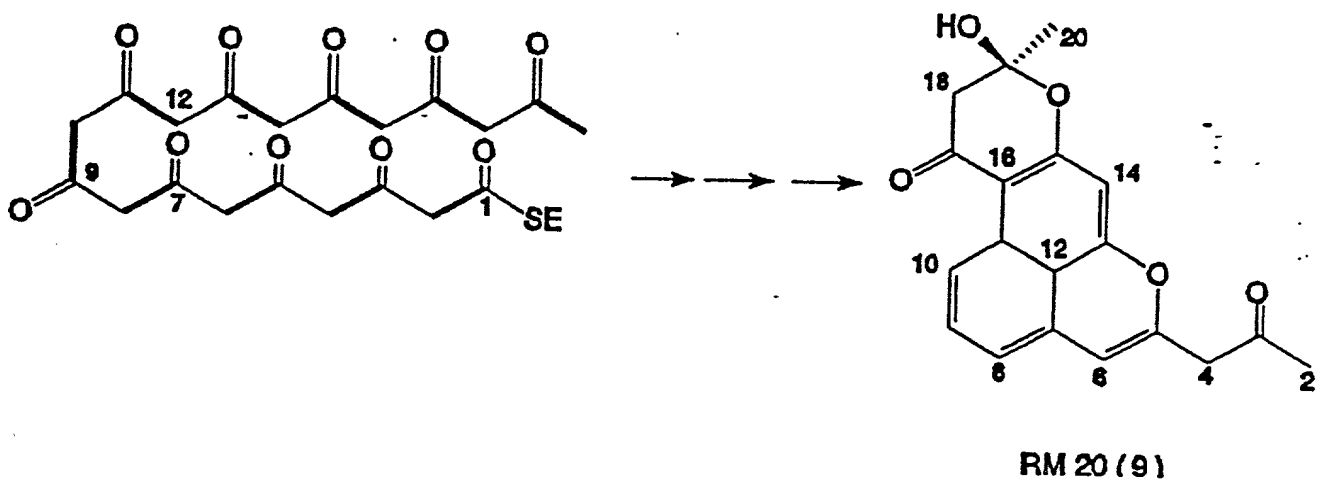
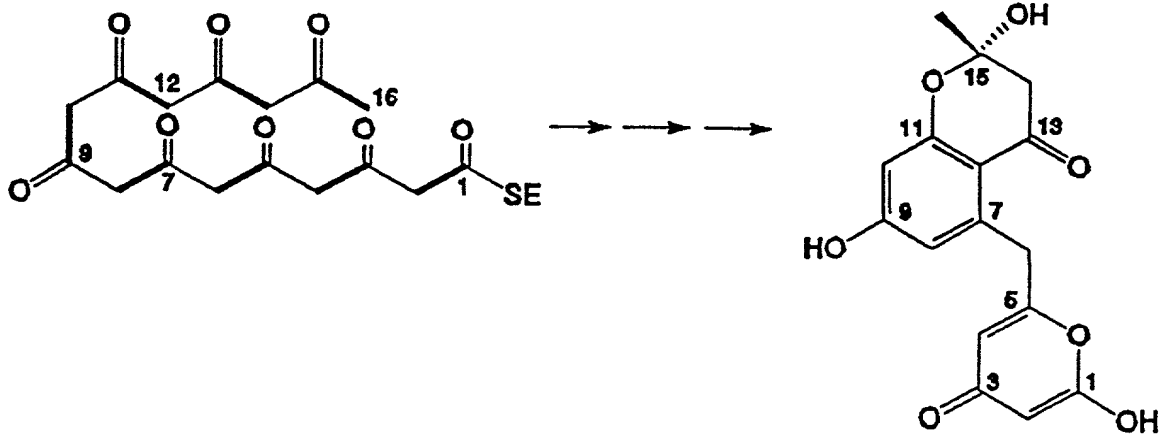
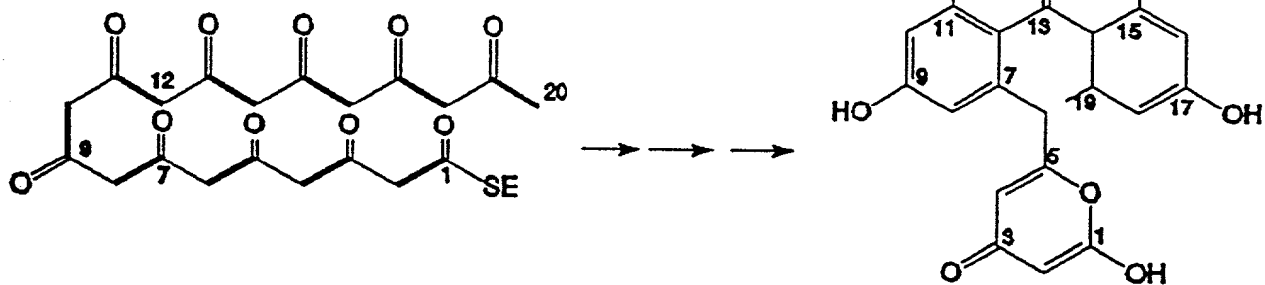


Figure 8

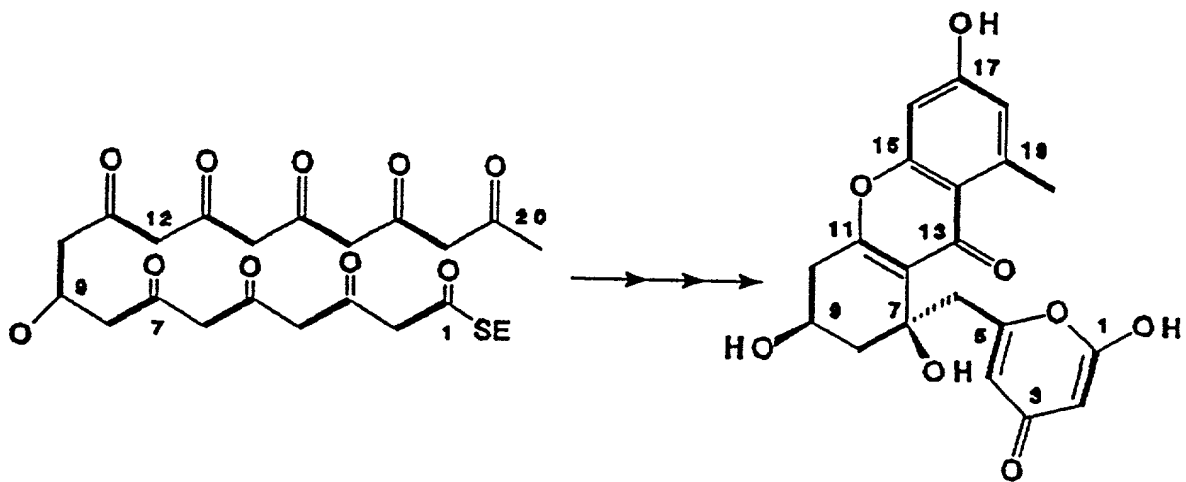


SEK4 (12)

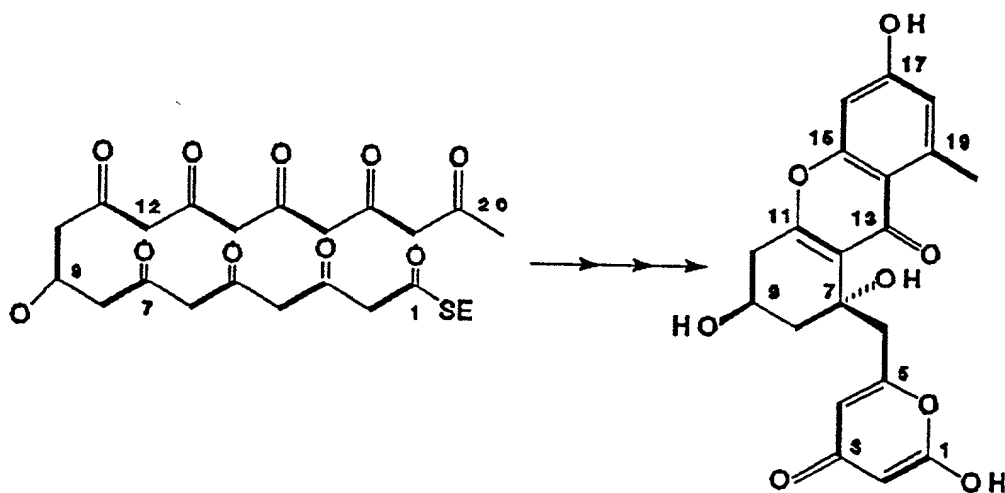


SEK15 (13)

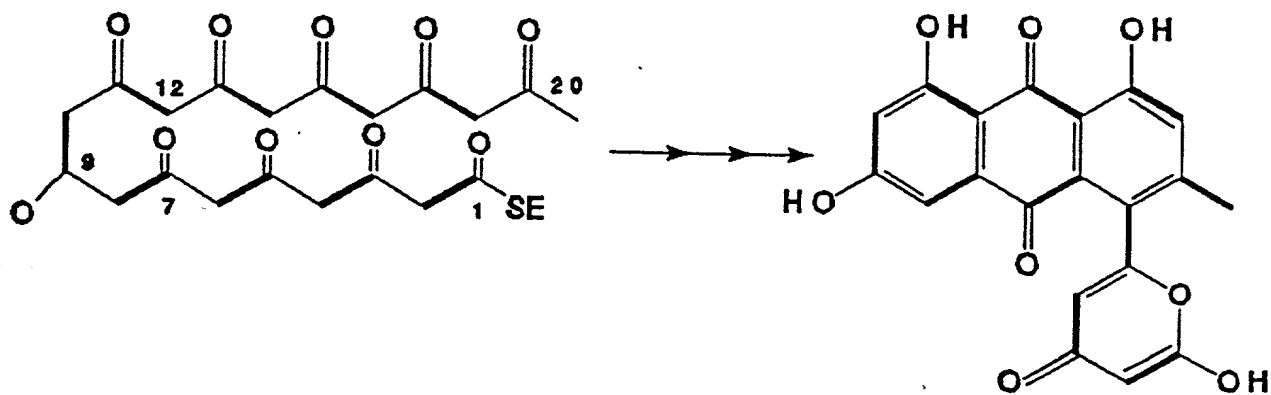
Figure 8a



RM20b (14)



RM20c (15)



SEK15b (16)

Figure 8b

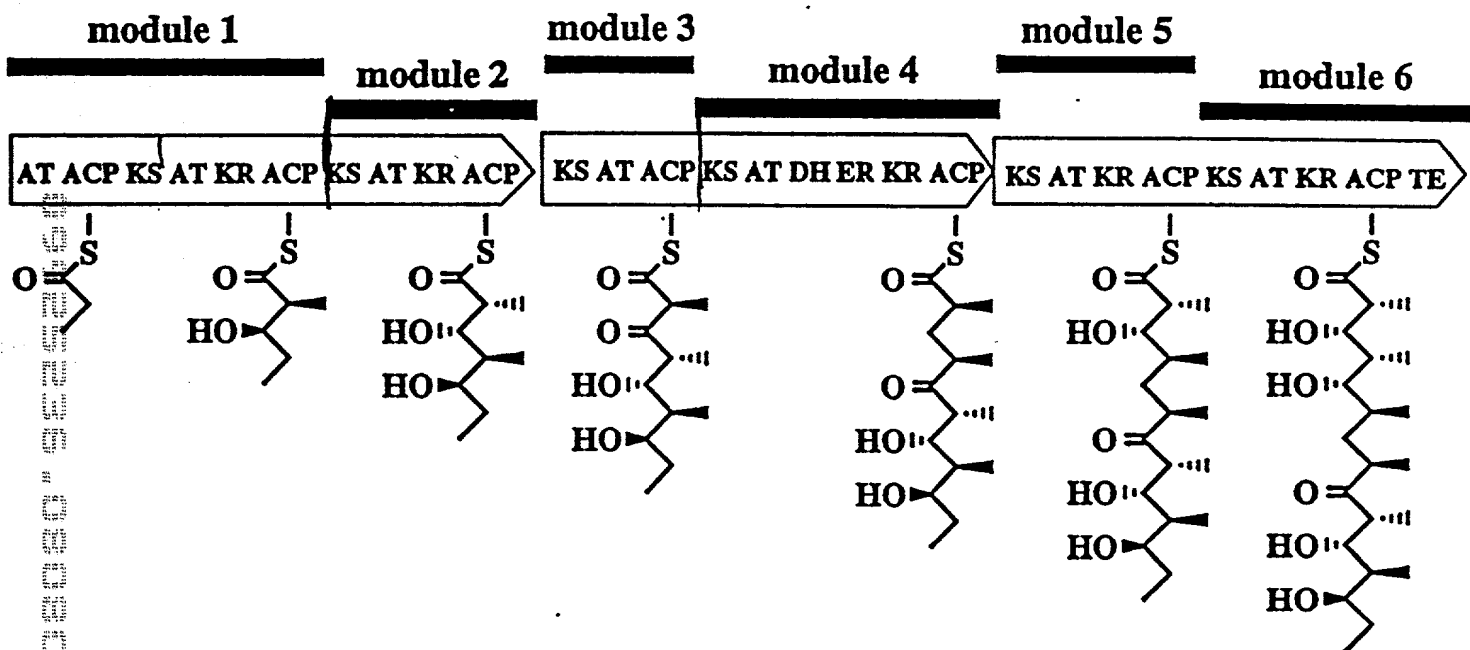
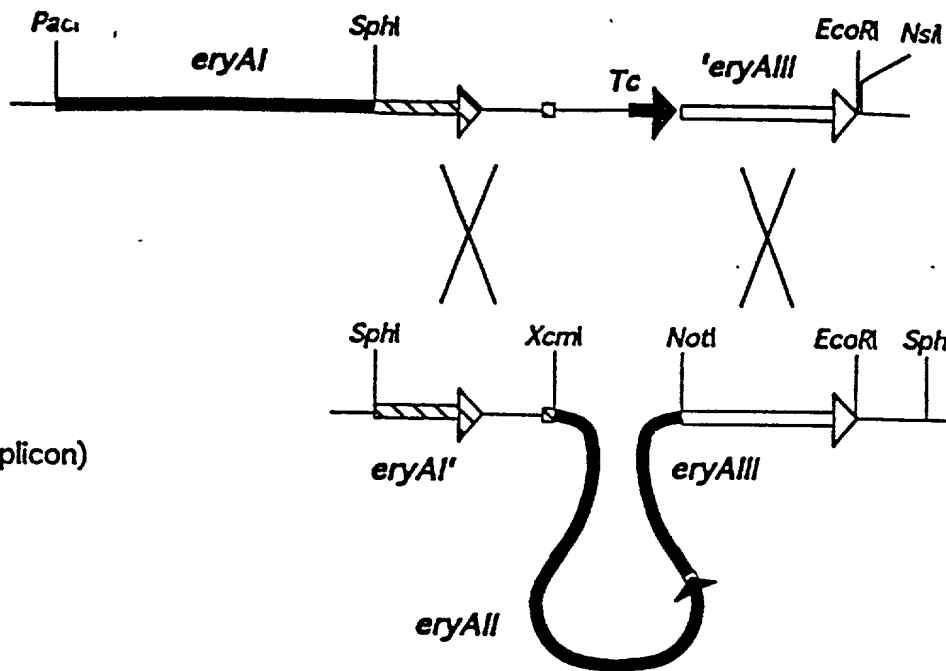


Figure 9

RECIPIENT: pCK5
(Ap^R, Tc^R)

DONOR: pCK6
(Cm^R, temperature-sensitive replicon)



↓
Ap^R, Cm^R @ 30°C

↓
Ap^R, Cm^R @ 44°C

↓
Ap^R @ 30°C

↓
Ap^R, Cm^S, Tc^S @ 44°C

Figure 10



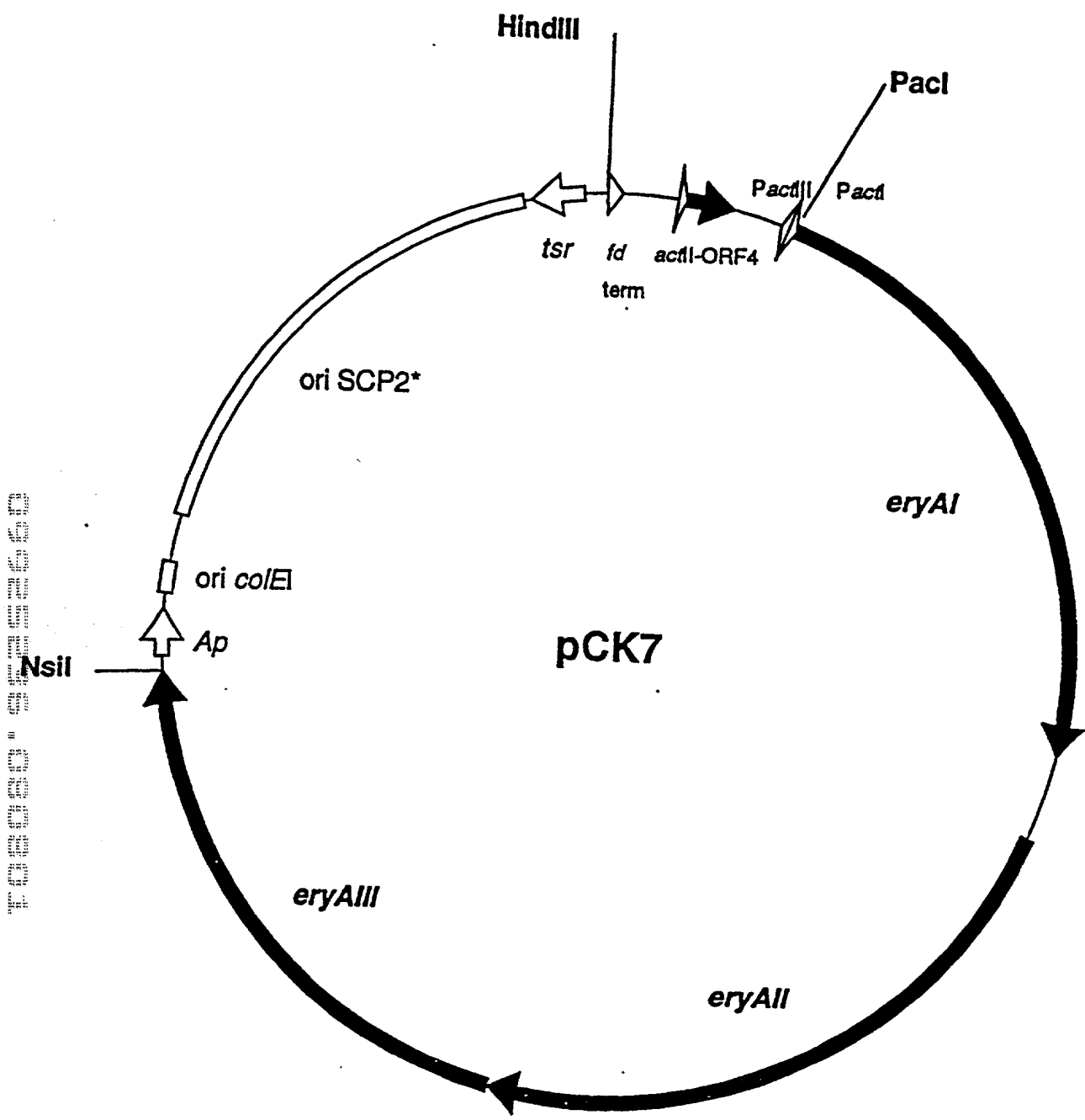


Figure 11